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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/735,939	12/14/2000	Stephane S. Roch	9-13528-111US KD/bm	8077

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EXAMINER	
HEINRICHS, CHRISTOPHER P	
ART UNIT	PAPER NUMBER
2663	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/735,939	ROCH ET AL	
	Examiner	Art Unit	
	Christopher P. Heinrichs	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11/17/2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6,8-12,14-20,22,25-29 and 31-33* is/are rejected.

7)☐ Claim(s) *5,7,13,21,23,24 and 30* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 December 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12/14/2000*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-2, 10-12, 17-18, and 27-29, are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,363,053 to Schuster et al in view of US Patent 6,662,221 to Gonda et al.

4. With regard to claims 1, 2, 17 and 18, Schuster discloses a VPN gateway (fig 6 item 308 and col 12 lines 13-15), that performs the method of claims 1, adapted to provide dynamic QoS treatment of data traffic (col 12 line 57-59) within a secure VPN tunnel (col 6 lines 45-60), the gateway comprising means to

obtain QoS information concerning a desired QoS treatment for data traffic within the VPN tunnel (SLA and QoS Specification); means for forwarding (fig 6, output of item 308, from which the lightning bolt shape protrudes) the QoS information through the VPN tunnel to a VPN gateway at an opposite end of the VPN tunnel (col 9 line 62 – col 10 line 4); and means for attaching a QoS marker (ToS byte value is one of the QoS characteristics specified by the SLA, col 13 lines 49-50) based on the QoS information to the data traffic within the VPN tunnel (packets are tagged as set forth in col 7 line 55 - col 8 line 13). Schuster fails to explicitly disclose that the gateway have means for querying a policy database to obtain the QoS information. However, Gonda discloses a system that includes a secure VPN tunnel (col 4 line 40-46) gateway (fig 1 item 38, and col 4 lines 28-29), with a client computer system (fig 1 item 40, and fig 3 item 310) that communicates with a server system (fig 3 item 320) and, through the gateway, hence finally by the gateway, queries the server system (col 6 lines 51-55) as described by fig 5 and col 8 lines 4-13 and 27-47, with emphasis put on lines 40-41 and the use of the term SLA, all of which describes how a database is queried by the gateway to get the QoS information. This provides a means for the gateway to know what QoS markers to attach. Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to include the details of the database query disclosed by Gonda with the apparatus and method disclosed by Schuster to arrive at the inventions of claims 1, 2 and 13. The motivation to do so would have been that the gateway disclosed by Schuster receives SLA (policy) / QoS characteristic information as shown in fig 7 item 338, and there must have been

some mechanism that instigated the sending of the SLA (policy) / QoS characteristic information to the gateway.

5. With regard to claims 10-12 and 27-29, Schuster and Gonda disclose the elements of claims 1 and 17. Gonda *explicitly* discloses the querying of the policy database (which resides at the service provider), Schuster discloses that during the communications session, at predetermined intervals (periodically) the specified QoS characteristics may be modified (col 12 line 53 – col 13 line 7), which as set forth in the rejections of claims 1 and 17, entail querying the policy database. This inclusion of the modifiable QoS with the inventions of claims 1 and 17 result in the inventions of claims 10-12 and 27-29. It would have been obvious to one ordinarily skilled in the art at the time of the invention to make this combination to arrive at the inventions of claims 10-12 and 27-29. The motivation to do so would have been the same as that set forth in the rejection of claims 1 and 17, as the dynamic QoS capabilities and policy database querying functionality are simply further functionalities disclosed by Schuster.

6. Claims 3-4, 6, 8-9, 14-16, 19-20, 22, 25-26, and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,363,053 to Schuster et al in view of US Patent 6,662,221 to Gonda et al as applied to claims 1 and 13 above, and further in view of US Patent 6,765,927 to Martin et al and US Patent 6,519,254 to Chuah et al.

7. With regard to claims 3-4, 6, 8-9, 19-20, 22, and 25-26, Schuster and Gonda disclose the elements of claims 1 and 17 but fail to disclose that the QoS information obtained from the policy database comprise the Tspec and Rspec parameters. However, Martin discloses a gateway (figs 1 and 2 item 140, and col 2 lines 56-57) that queries a policy database (figs 1 and 2 item 150) that keeps the QoS information (col 2 lines 60-61), the gateway sending packets (col 2 line 66), when the policy database is queried the information comprises the Tspec and Rspec parameters. Col 4 lines 19-26 describe that the rules defining QoS limitations are pulled down (queried) followed by the forwarding of the RSVP Path and Resv packets, which said parameters (figs 3A and 3B), which are QoS markers that are mapped and inserted into data traffic (col 4 liens 29-33). The RSVP processing disclosed by Martin is performed at a start of an RSVP communications session in response to a session initiation message (RSVP message packets, col 4 lines 4-5) received from a customer (source host, fig 2 item 110). Chuah discloses that a RSVP can be used in conjunction with tunnels (see title and abstract), such as the VPN tunnels disclosed by Schuster and Gonda. The means for mapping of claim 20 is the management interface 240 of fig 2. The customer (source host 110 disclosed by Martin) makes a request indicating desired QoS treatment that is confirmed and, if available, updates the policy database by querying it (Martin, col 4 lines 19-26). By using RSVP with the tunnels and gateways disclosed by Schuster and Gonda, and by implementing the mechanism of querying the policy database for the specialized QoS parameters that work in conjunction with RSVP, one arrives at the

inventions of claims 3 and 4. The motivation to use RSVP with a VPN tunnel would have been to guarantee services, as suggested in the abstract of Chuah. The motivation to query the policy database for Rspec and Tspec parameters would have been to support the RSVP function with the VPN tunneling disclosed by Schuster and Gonda.

8. With regard to claims 14-16, and 31-33, Schuster and Gonda disclose the method of claim 1 but fail to explicitly disclose the methods of claims 14, 15, and 16. However, Martin and Chuah disclose the RSVP functionality as set forth in the rejection of claims 3, 4, 8, and 9. At the outset of the RSVP session, the service provider (at the policy database) is notified (via the database query) of the indicated QoS treatment (requested QoS, col 4 line 16) at the start of the RSVP communication session, and modifications (col 4 lines 26) in the indicated QoS treatment are also notified to the service provider (col 4 lines 3-38 describe the setup process, and col 3 lines 42-46 describe that the gateway make its decisions in conjunction with the policy server, which resides at the ISP).

Allowable Subject Matter

9. Claims 5, 7, 13, 21, 23-24, and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Jorgensen (6,628,629),Reservation Based Prioritization Method for Wireless Transmission of Latency and Jitter Sensitive IP-Flows in a Wireless Point to Multi-Point Transmission System.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Heinrichs whose telephone number is 571-272-8397. The examiner can normally be reached on Monday through Friday, 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C. Heinrichs
AU 2663

RICKY NGO
PRIMARY EXAMINER

7/25/05